Fig.1
(Related Art)

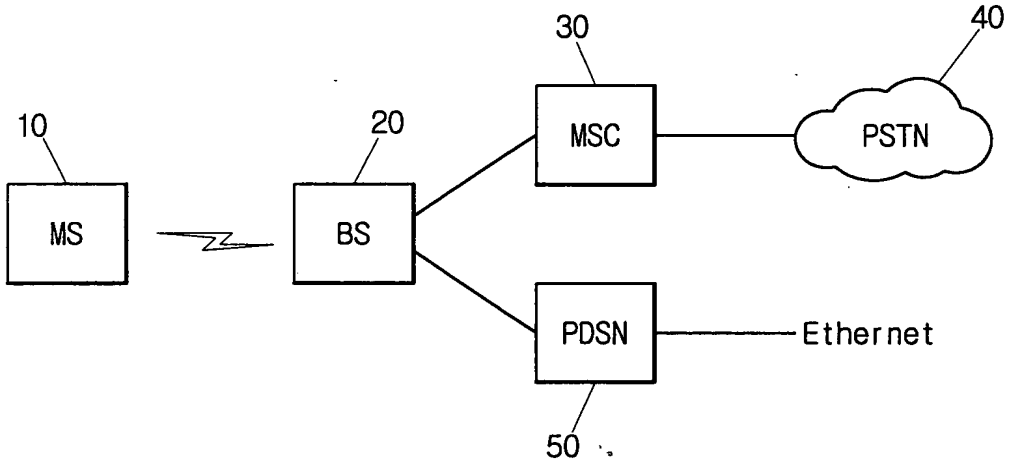


Fig.2A

Transmit Rate (bits/sec)	MuxPDU Header			Primary Traffic (bits/ block)	Signaling Traffic (bits/ block)	Secondary Traffic (bits/block)	Permitted on			
	Mixed Mode (MM)	Traffic Type (TT)	Traffic Mode (TM)				FCH	DCCH	SCCH	SCH
9600	'0'	-	-	171	0	0	Y	Y	Y	Y
	'1'	'0'	'00'	80	88	0	Y	Y	N	N
	'1'	'0'	'01'	40	128	0	Y	Y	N	N
	'1'	'0'	'10'	16	152	0	Y	Y	N	N
	'1'	'0'	'11'	0	168	0	Y	Y	N	N
	'1'	'1'	'00'	80	0	88	Y	Y	N	N
	'1'	'1'	'01'	40	0	128	Y	Y	N	N
	'1'	'1'	'10'	16	0	152	Y	Y	N	N
	'1'	'1'	'11'	0	0	168	Y	Y	Y	Y
4800	-	-	-	80	0	0	Y	N	N	N
2400/ 2700	-	-	-	40	0	0	Y	N	N	N
1200/ 1500	-	-	-	16	0	0	Y	N	N	N

Fig.2B

Transmit Rate (bits/sec)	MuxPDU Header: Mixed Mode (MM)	MuxPDU Header: Frame Mode (FM)	Primary Traffic (bits/ block)	Signaling Traffic (bits/ block)	Secondary Traffic (bits/block)	Permitted on: FCH	Permitted on: DCCH	Permitted on: SCCH	Permitted on: SCH
14400	'0'	-	266	0	0	Y	Y	Y	Y
	'1'	'0000'	124	138	0	Y	Y	N	N
	'1'	'0001'	54	208	0	Y	Y	N	N
	'1'	'0010'	20	242	0	Y	Y	N	N
	'1'	'0011'	0	262	0	Y	Y	N	N
	'1'	'0100'	124	0	138	Y	Y	N	N
	'1'	'0101'	54	0	208	Y	Y	N	N
	'1'	'0110'	20	0	242	Y	Y	N	N
	'1'	'0111'	0	0	262	Y	Y	Y	Y
	'1'	'1000'	20	222	20	Y	Y	N	N
7200	'0'	-	124	0	0	Y	N	N	N
	'1'	'000'	54	67	0	Y	N	N	N
	'1'	'001'	20	101	0	Y	N	N	N
	'1'	'010'	0	121	0	Y	N	N	N
	'1'	'011'	54	0	67	Y	N	N	N
	'1'	'100'	20	0	101	Y	N	N	N
	'1'	'101'	0	0	121	Y	N	N	N
	'1'	'110'	20	81	20	Y	N	N	N
3600	'0'	-	54	0	0	Y	N	N	N
	'1'	'00'	20	32	0	Y	N	N	N
	'1'	'01'	0	52	0	Y	N	N	N
	'1'	'10'	20	0	32	Y	N	N	N
	'1'	'11'	0	0	52	Y	N	N	N
1800	'0'	-	20	0	0	Y	N	N	N
	'1'	-	0	0	20	Y	N	N	N

Fig.2C

	MuxPDU Header		Traffic bits/ block
	sr_id	Reserved	
Rate Set 1	'001'-'110'	'000'	170/346
	'111'	'000'	0
Rate Set 2	'001'-'110'	'000'	266/538
	'111'	'000'	0

Fig.3

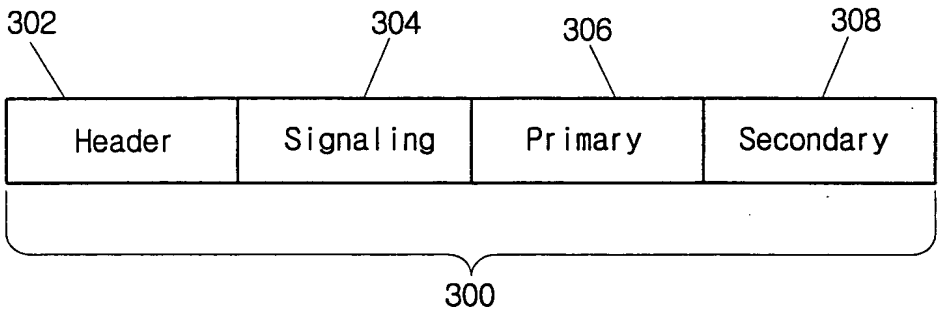


Fig.4

kind of traffic		priority
Signaling	Signaling	1
Data	RLP SYNK frame	2
	RLP SYNK ACK frame	3
	RLP ACK frame	4
	RLP NAK frame	5
	RLP Retransmission frame	6
	RLP NEW frame	9
	RLP RLP frame	12
Voice	Full Rate	7
	Half Rate	8
	Quarter Rate	10
	Eighth Rate	11

Fig.5

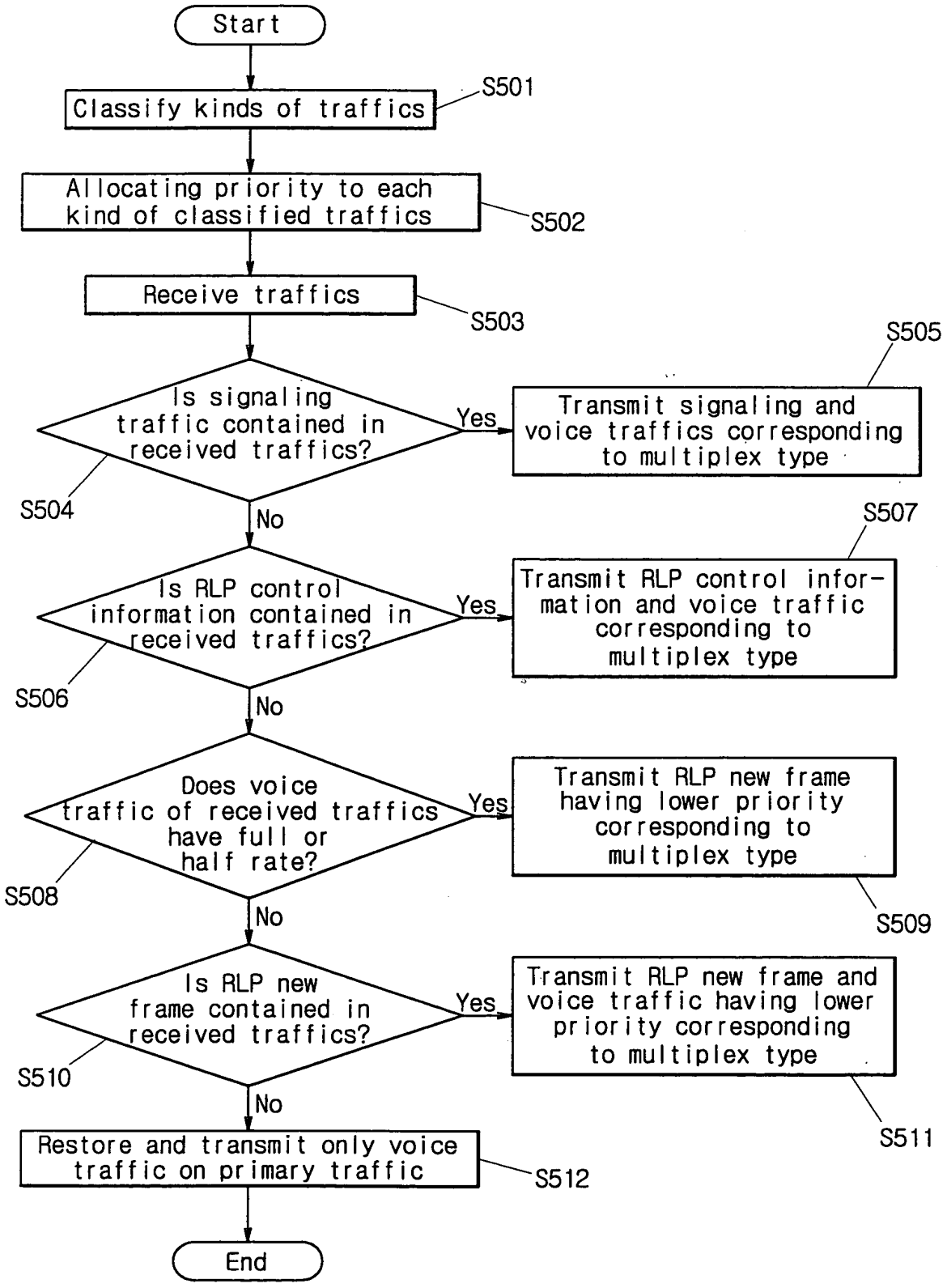

Start
Classify kinds of traffics
S501
Allocating priority to each kind of classified traffics
S502
Receive traffics
S503
Is signaling traffic contained in received traffics?
Yes
Transmit signaling and voice traffics corresponding to multiplex type
S505
S504
No
Is RLP control information contained in received traffics?
Yes
Transmit RLP control information and voice traffic corresponding to multiplex type
S507
S506
No
Does voice traffic of received traffics have full or half rate?
Yes
Transmit RLP new frame having lower priority corresponding to multiplex type
S509
S508
No
Is RLP new frame contained in received traffics?
Yes
Transmit RLP new frame and voice traffic having lower priority corresponding to multiplex type
S511
S510
No
Restore and transmit only voice traffic on primary traffic
S512
End

Fig.6

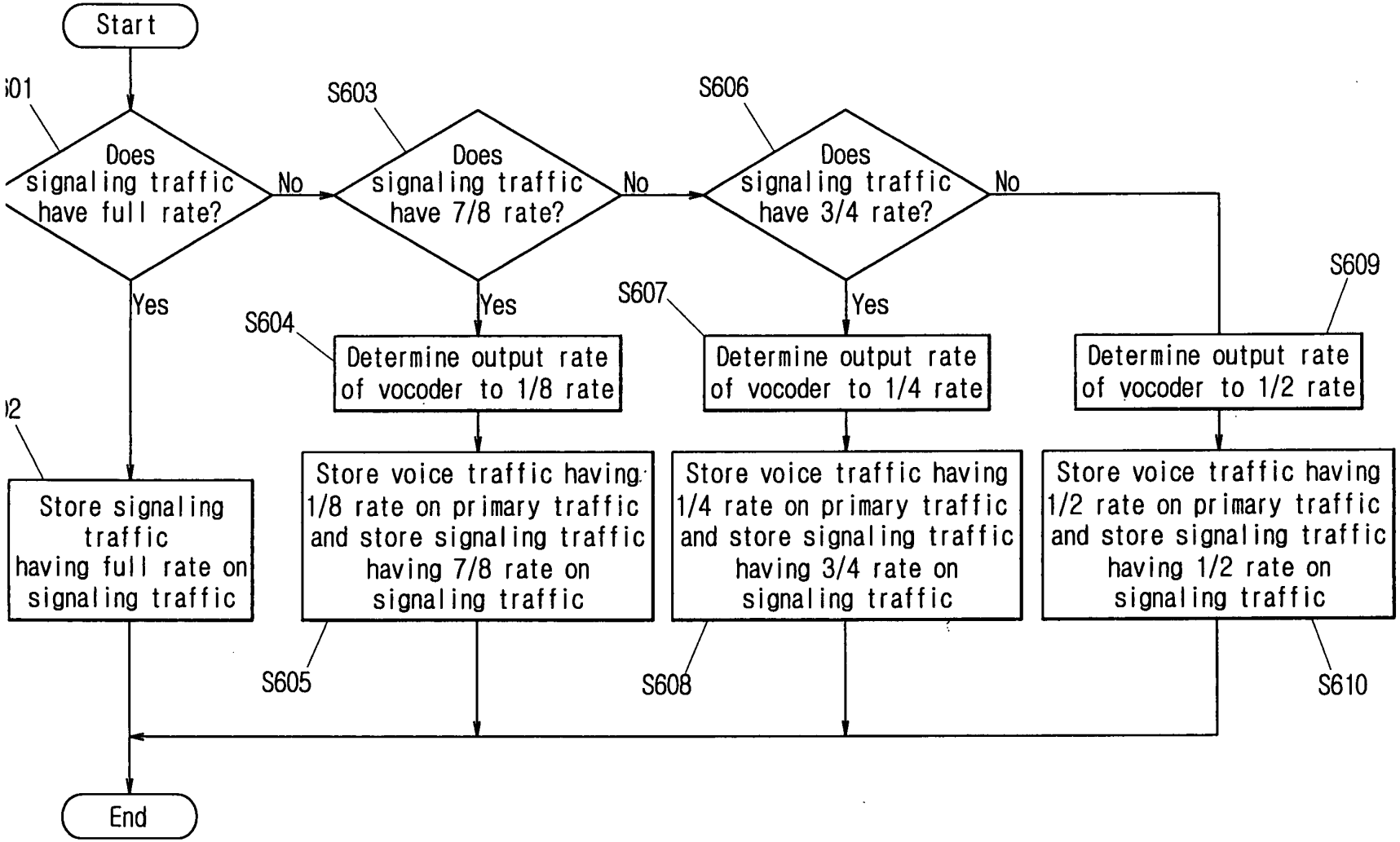

Start
S601
Does signaling traffic have full rate?
No
S603
Does signaling traffic have 7/8 rate?
No
S606
Does signaling traffic have 3/4 rate?
No
Yes
Yes
Yes
S604
Determine output rate of vocoder to 1/8 rate
S607
Determine output rate of vocoder to 1/4 rate
S609
Determine output rate of vocoder to 1/2 rate
S602
Store signaling traffic having full rate on signaling traffic
Store voice traffic having 1/8 rate on primary traffic and store signaling traffic having 7/8 rate on signaling traffic
Store voice traffic having 1/4 rate on primary traffic and store signaling traffic having 3/4 rate on signaling traffic
Store voice traffic having 1/2 rate on primary traffic and store signaling traffic having 1/2 rate on signaling traffic
S605
S608
S610
End

Fig.7

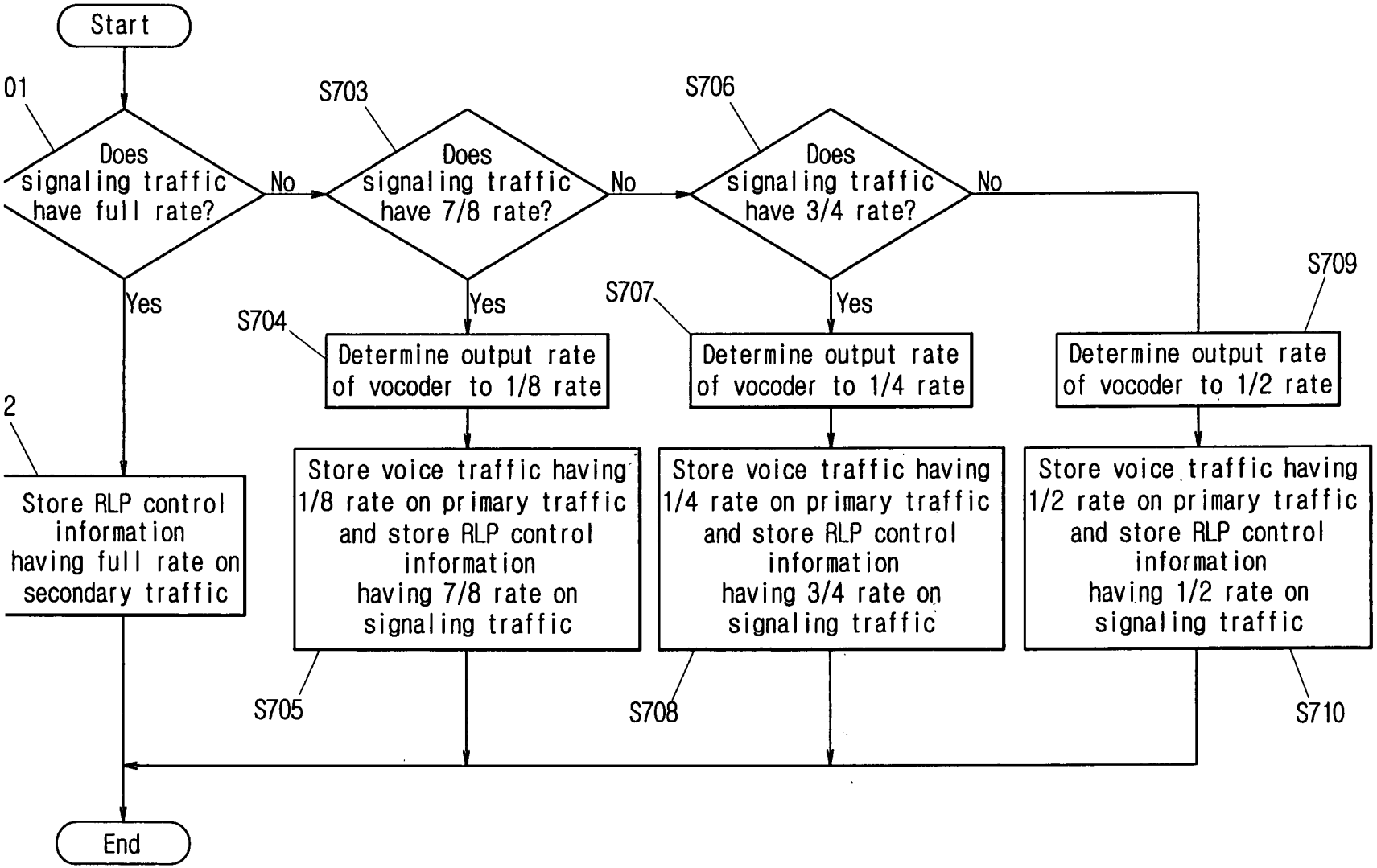

Start
01
Does signaling traffic have full rate?
No
S703
Does signaling traffic have 7/8 rate?
No
S706
Does signaling traffic have 3/4 rate?
No
Yes
Yes
Yes
S704
Determine output rate of vocoder to 1/8 rate
S707
Determine output rate of vocoder to 1/4 rate
S709
Determine output rate of vocoder to 1/2 rate
2
Store RLP control information having full rate on secondary traffic
Store voice traffic having 1/8 rate on primary traffic and store RLP control information having 7/8 rate on signaling traffic
Store voice traffic having 1/4 rate on primary traffic and store RLP control information having 3/4 rate on signaling traffic
Store voice traffic having 1/2 rate on primary traffic and store RLP control information having 1/2 rate on signaling traffic
S705
S708
S710
End

Fig.8

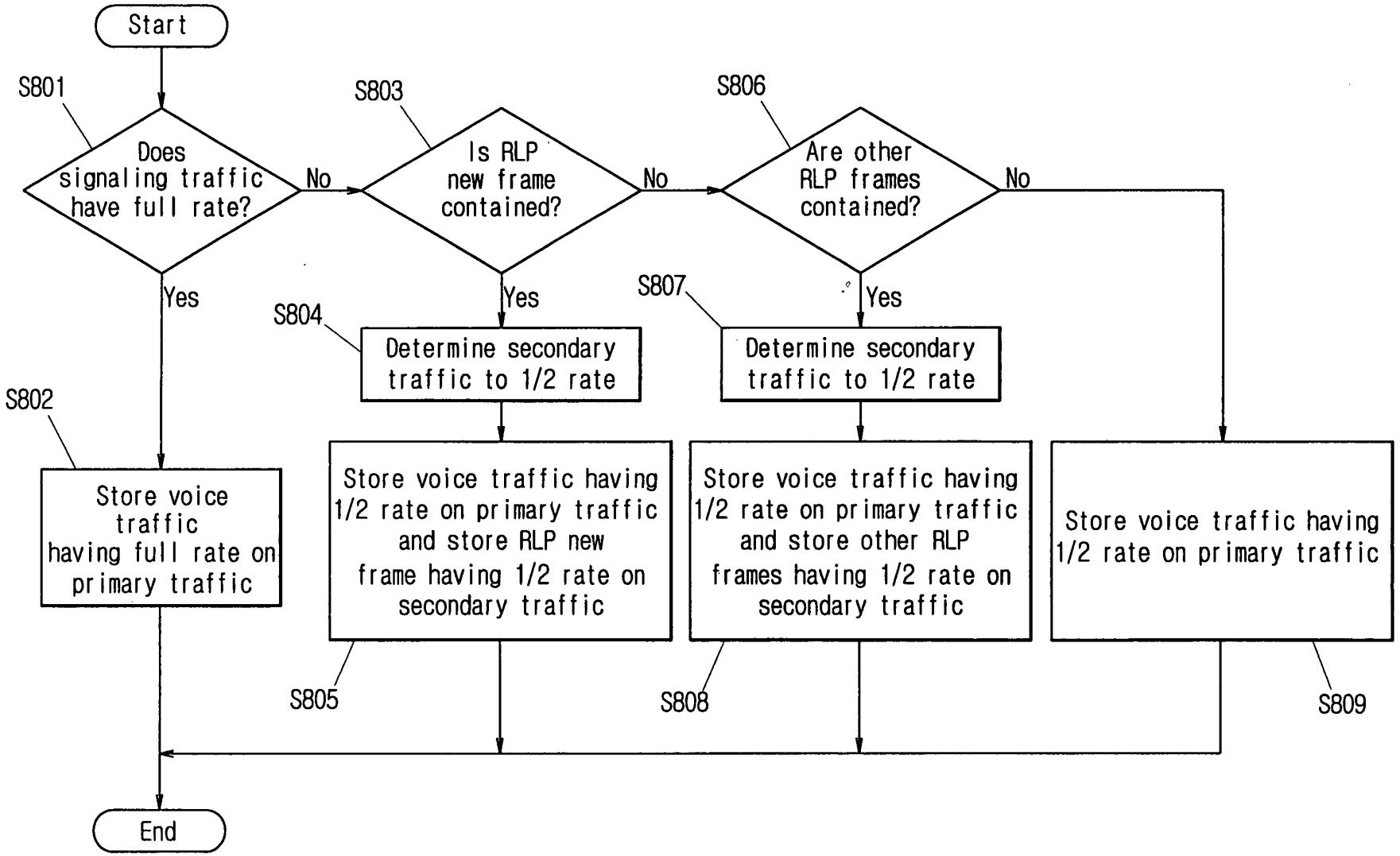
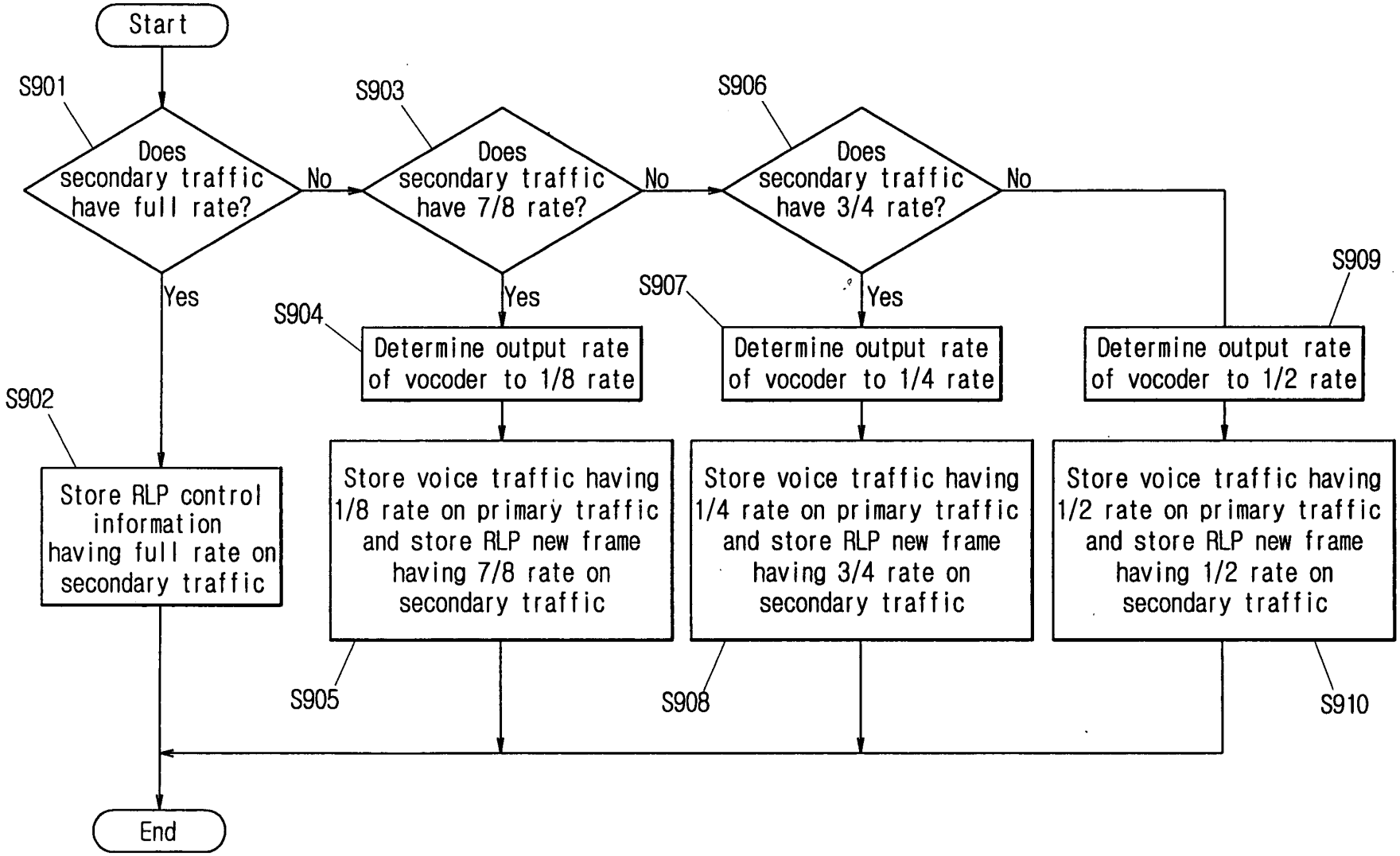

Start
S801
Does signaling traffic have full rate?
No
S803
Is RLP new frame contained?
No
S806
Are other RLP frames contained?
No
Yes
Yes
Yes
S802
Store voice traffic having full rate on primary traffic
S804
Determine secondary traffic to 1/2 rate
S807
Determine secondary traffic to 1/2 rate
Store voice traffic having 1/2 rate on primary traffic and store RLP new frame having 1/2 rate on secondary traffic
Store voice traffic having 1/2 rate on primary traffic and store other RLP frames having 1/2 rate on secondary traffic
Store voice traffic having 1/2 rate on primary traffic
S805
S808
S809
End

Fig.9


Start
S901
Does secondary traffic have full rate?
No
S903
Does secondary traffic have 7/8 rate?
No
S906
Does secondary traffic have 3/4 rate?
No
Yes
Yes
Yes
S902
Store RLP control information having full rate on secondary traffic
S904
Determine output rate of vocoder to 1/8 rate
S907
Determine output rate of vocoder to 1/4 rate
S909
Determine output rate of vocoder to 1/2 rate
Store voice traffic having 1/8 rate on primary traffic and store RLP new frame having 7/8 rate on secondary traffic
Store voice traffic having 1/4 rate on primary traffic and store RLP new frame having 3/4 rate on secondary traffic
Store voice traffic having 1/2 rate on primary traffic and store RLP new frame having 1/2 rate on secondary traffic
S905
S908
S910
End